

## LISTINGS OF THE CLAIMS

**Please amend the claims as follows:**

1. (Currently Amended) A housing having a liquid-tight electric bushing comprising:  
an opening in the housing of an X-ray tube, wherein a coolant oil is circulated through  
the housing at an overpressure to cool the X-ray tube during operation thereof;~~and~~  
a printed circuit board mounted to the housing and having at least first and second  
layers, the at least first and second layers being configured without a continuous opening  
such that the printed circuit board is a liquid-tight closure that prevents the coolant oil from  
flowing outside of the housing, the first layer being produced from an electrical insulation  
material and being a top side of the printed circuit board that spans the opening and the  
second layer being a conductor track in the interior of the printed circuit board;[[,]] wherein a  
first contact element is disposed on the top side and in a bore through the first layer that  
extends to at least the second layer;  
a seal disposed between the printed circuit board and the housing; and  
a pressure plate that contacts an underside of the printed circuit board and presses the  
printed circuit board against the seal.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The housing as defined by claim 1, wherein ~~the first layer is an electrical insulation material~~ the pressure plate presses the printed circuit board against the seal such that printed circuit board is the liquid-tight closure that prevents the coolant oil from flowing outside of the housing.

5. (Previously Presented) The housing as defined by claim 1, wherein the first contact element is coupled to a second contact element via the second layer.

6. (Cancelled)

7. (Currently Amended) The housing as defined by claim 5, wherein the second contact element is on ~~an~~ the underside that is opposite the top side.

8. (Previously Presented) The housing as defined by claim 5, wherein the second contact element extends to an outside an edge of the printed circuit board.

9. (Previously Presented) The housing as defined by claim 1, wherein the printed circuit board is flexible.

10. (Previously Presented) The housing as defined by claim 1, wherein the printed circuit board comprises a plurality of second layers, located one above the other.

11. (Currently Amended) The housing as defined by claim 5, ~~claims~~, wherein the first contact element and the second contact element are coupled via a plurality of conductor tracks, which are located one above the other and are electrically coupled.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) A method of using a printed circuit board to close an opening provided in a housing and as an electric bushing comprising:

disposing a seal between the printed circuit board and the housing,

disposing a pressure plate that contacts an underside of the printed circuit board to press the printed circuit board against the seal,

mounting the printed circuit board comprising a first layer on the housing of an X-ray tube, wherein a coolant oil is circulated through the housing at an overpressure to cool the X-ray tube during operation thereof, the printed circuit board having no continuous opening such that the printed circuit board is a liquid-tight closure that prevents the coolant oil from flowing to the outside of the housing, wherein the first layer spans the opening and is the top side of the printed circuit board and is produced from an electrical insulation material, and

disposing a first contact element on the top side and through a bore in the top side, wherein the bore extends to at least a second layer formed in the printed circuit board, the second layer being a conductor track.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) The method as defined by claim 15, wherein ~~the method further includes producing the first layer from an electrical insulation material~~ mounting the printed circuit board comprises mounting the pressure plate on the housing to press the printed circuit board against the seal such that the printed circuit board is the liquid-tight closure.

19. (Previously Presented) The method as defined by claim 15, wherein the method further comprises connecting the first contact element to a second contact element via the second layer.

20. (Cancelled)

21. (Currently Amended) The method as defined by claim 19, wherein the method further comprises disposing the second contact element on ~~an~~ the underside that is opposite the top side.

22. (Previously Presented) The method as defined by claim 19, wherein the method further comprises extending the second contact element to an outside edge of the printed circuit board.

23. (Previously Presented) The method as defined by claim 15, wherein the method further comprises using the printed circuit board that is flexible.

24. (Previously Presented) The method as defined by claim 15, wherein the method comprises using the printed circuit board that has a plurality of second layers located one above the other

25. (Previously Presented) The method as defined by claim 24, wherein the first contact element and a second contact element are connected via a plurality of conductor tracks in alignment with each other.

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)